CMJ

CROATIAN MEDICAL JOURNAL is indexed in **Biosis, Current Contents®/Clinical Medicine, Excerpta Medica/EMBASE, Index Medicus/MEDLINE, ISI Alerting Services℠, Science Citation Index® (SciSearch)**

Aims and Scope

Croatian Medical Journal (CMJ) is an international peer reviewed journal open to scientists from all fields of medicine and related research (1).

Editorial Policy

We welcome all contributions that enhance or illuminate medical sciences. In addition to scientific articles, letters, news and comments of all kinds and forms are welcome if they serve the purpose of transfer of original and valuable information to our readers. Our special interest lays in two fields (2). The first pertains to the *general Croatian medical topics relevant for global medicine*. Croatian high-tech reports are scarce, but the topics of general interest (such as public health in its broadest sense) are highly relevant to Croatian and international experts and are thus our highest priority. The second area is medicine in transitional and emerging countries. We are paying special attention to this area for three reasons: (a) Croatia is an "emerging" country and a country in transition; (b) such countries need and deserve assistance which we can offer; and (c) we can provide a medium for reporting biomedicine worth publishing and preserving from developing and transitional countries that would receive little attention otherwise.

The editorial procedure of the CMJ can be summarized in our publication priorities and general guidelines for prospective authors (Table 1). These priorities should be understood broadly; we welcome good scientific reports regardless of the topic and form. However, the editorial preferences in Table 1 may encourage authors uncertain of the significance of their reports. CMJ also solicits works of art or poetry, which either deal with medicine or are produced by medical workers.

To give an equal publishing chance to manuscripts from different environments, we will normally publish no more than two papers by the same author or coauthor within one calendar year. This rule also applies to editors. Also, we recommend authors not to separate fragments of a study into individual reports, but rather to present a full report on the topic.

Editorial Practices

From its very beginning, the CMJ aimed towards high standards in all aspects of publication, especially in manuscript selection by high-quality peer review (3). The Editor-in-Chief reads every manuscript received and assigns it a general priority level: (a) manuscripts sent to reviewers immediately; (b) manuscripts returned to authors with suggestions for modification and improvement; and (c) rejected manuscripts. Both Co-Editors-in-Chief read the revised manuscript. If the manuscript is improved adequately, it is sent to *three* reviewers for extramural review and to the Statistical Editor, if warranted. This editorial procedure reinforces our author-friendly policy because all manuscripts undergo editorial scrutiny and advice previously assigned to those selected for the perceived need of assistance.

Authorship Criteria

CMJ follows the authorship criteria developed by the International Committee of Medical Journal Editors (4). All persons designated as authors should qualify for authorship, and all those who qualify should be listed. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. One or more authors should take responsibility for the integrity of the work as a whole, from inception to published article.

Authorship credit should be based only on 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Conditions 1, 2, and 3 must all be met. Acquisition of funding, the collection of data, or general supervision of the research group, by themselves, do not justify authorship. Authors should provide a description of what each contributed, and editors should publish that information. All others who contributed to the work who are not authors should be named in the Acknowledgments, and what they did should be described. Increasingly, authorship of multicenter trials is attributed to a group. All members of the group who are named as authors should fully meet the above criteria for authorship. Group members who do not meet these criteria should be listed, with their permission, in the Acknowledgments or in an Appendix. The order of authorship on the byline should be a joint decision of the coauthors. Authors should be prepared to explain the order in which authors are listed. List (in the Acknowledgments) all contributors who do not meet the criteria for authorship, such as a person who provided purely technical help, writing assistance, or a department chair who provided only general support. Financial and material support should also be acknowledged. Groups of persons who have contributed materially to the paper but whose contributions do not justify authorship may be listed under a heading such as "clinical investigators" or "participating investigators", and their function or contribution should be described, for example "served as scientific advisors", "critically reviewed the study proposal", "collected data", or "provided and cared for study patients". Because readers may infer their endorsement of the data and conclusions, all persons must have given written permission to be acknowledged.

After submission of a manuscript, the corresponding author will be asked to fill in the Authorship Statement form, with details about the contribution of each author to the submitted work. The corresponding author guarantees that all listed authors are responsible for the content of the manuscript, and that the final version of the manuscript has been approved by all authors.

Language

The language of the CMJ is US English. The Editors retain the customary right to style and, if necessary, shorten texts accepted for publication. This does not mean that we prefer short articles – actually, we do not limit their size – but rather a resection of the obviously redundant material.

The past tense is recommended in the Results Section. Avoid using Latin terms; if necessary, they should be added in parentheses after the English terms. Their real names rather than "levels" or "values" should refer to parameters with concrete units (e.g., concentration). Above all, the author should have in mind that his/her article is intended for a general medical journal and a general reader.

Organization of the Manuscript

Manuscripts should meet the general requirements agreed upon by the International Committee of the Medical Journal Editors (4), known as the Vancouver System. Croatian-speaking authors may consult extensive instructions in Croatian (5).

Type the whole manuscript double-spaced.

First (Title) Page

The first page should carry: (a) the article title; (b) full names (first names, middle-name initials, if applicable), and last names of all authors; (c) names of the department(s) and institution(s) to which the work should be attributed; (d) a short running head of not more than 40 characters (count letters and spaces) placed at the foot of the page and identified. If authors belong to several different institutions, superscript digits should be used to relate the

Table 1. Publishing priorities in the *Croatian Medical Journal*

Topics of the manuscript	Acceptance priority	Useful guidelines for the content and structure of the manuscript	
		general	specific
FIELD OF STUDY			
Basic sciences	high	relevant for clinical work	completed testing of a defined hypothesis
Clinical sciences	high	proper study design	clear and simple hypothesis, adequate sample size and controls, statistics
Public health	very high	originality of research data	no compilations of publicly available data (e.g., from WHO)
Health care organization	very high	large, of wide (e.g., national) importance, not (only) plans for the future	not descriptive; only with a hypothesis, and concrete data; scientific analysis
Medicine in developing and emerging countries	very high	we are ready to assist less advantaged authors	first send us a draft by e-mail
War and post-war related medicine	very high	we are ready to assist less experienced authors	first send us a draft by e-mail
Health and human rights	very high	no politics; the work has to deal with health	no commentaries; the report should contain concrete data
Medical education	very high	research data	no commentaries; the report should contain concrete data
TYPES OF ARTICLES			
Original research articles	absolute preference	completed and high-quality work	clear hypothesis; strong, data-based arguments
Reviews	solicited only	on a relevant subject	significant own previous publications
Forum	discussion on an important topic	the case should be based on research data arguments	clearly written, with a sharp focus and relevance to modern medicine
Short communications	low	absolutely important to be published fast	the case must be strong
Case reports[a]	low	completeness and originality	clearcut relevance to the field
Correspondence	rather low	research-related only	precise, short, polite
Poetry and other artwork	very welcome	authors from medicine, or medicine as the subject	English language only

[a]Unique case of hithetro unknown symptom or disease; new correlations of two or more diseases; new variant of known disease's course; disease course indicating new therapeutic or side effects.

authors' names to respective institutions. Identical number(s) in superscript should follow the authors' names and precede the institution names. The name and institution of the first author (and other authors of the same institution) should not bear any number: number one should be applied to the first author on the list who does not come from the senior author's institution.

Second Page

The second page should contain the Abstract and six to ten key words. In selecting key words, the authors should strictly refer to the Medical Subject Headings (MeSH) list of the Index Medicus.

Other Pages

Each manuscript section should begin on a separate page, in the following sequence: title page, abstract and key words, text, acknowledgments, references, tables (each table complete with title and footnotes on a separate page), figure legends, and the last page.

Last Page

The last page should carry: (a) a list of abbreviations used in the paper (if necessary); (b) the name and mailing address of the corresponding author, accompanied by the telephone and fax numbers and e-mail; (c) source(s) of research support in the form of grants, equipment, drugs or all of these, (d) (optional) suggestions for the referees of the paper, with the complete mailing address, e-mail address, phone and fax numbers.

Text Organization and Style

Title

The title is the most important summary of a scientific article. CMJ prefers expressive titles to neutral ones. For example, the title "Elderly displaced persons display deeper psychological disturbances than younger ones" is preferred to "A multivariate analysis of psychological disturbances in elderly displaced persons compared to young ones". The title should also include information on the scope of investigation, e.g., the type of study (clinical, experimental, epidemiological), number of patients, average follow-up time, etc. If animal or cadaver experiments are reported, the title should carry this information.

Abstract

CMJ requires that the authors prepare a structured abstract of not more than 250 words. The abstract should include (at least) four headings:

Aim. State explicitly and specifically the purpose of the study. Formulations such as "The purpose of this study was to gain a better insight into the influence of several growth factors on the differentiation of bone marrow cells in the *in vitro* culture" should be replaced by "Analysis of *in vitro* differentiation of human bone marrow stem cells in the presence of INF- or TNF- ".

Methods. Concisely and systematically list the basic procedures, selection of study subjects or laboratory animals, methods of observation and analysis. Avoid listing of common or irrelevant methods; enable the reader to fathom the essence of your procedure(s) and methods. The essential data on patient characteristics belong here, not in the Results section.

Results. List your basic results without any introduction. Only essential statistical significances should be added in brackets. Draw no conclusions as yet: they belong into the next section.

Conclusion. List your conclusions in a short, clear and simple manner. State only those conclusions that stem directly from the results shown in the paper. Rather than summarizing the data, conclude from them.

Introduction

Go from the general, broad context of your work, to tell the reader what is already known, to what is not yet known, to what the problems are and to what you have decided to do.

The Introduction section should include the *a priori* hypothesis and specific protocol objectives. The author should briefly introduce the problem, particularly emphasizing the level of knowledge about the problem at the beginning of the investigation. Continue logically, and finish the section with a short description of the aim of the study. The Introduction section should generally not exceed one typewritten page. This is no place to write a review of the field or to mention textbooks commonplaces: you are addressing an educated reader, and this section should introduce him/her to the specific problem investigated.

Patients/Material and Methods

This section need not be brief. Use of subheadings is advised. For clinical trials define: (a) planned study population, including controls; (b) inclusion and exclusion criteria; (c) planned subgroup analyses; (d) prognostic factors that may affect study results; (e) outcome measures and minimum difference(s) to be considered clinically important; (f) planned treatment interventions; (g) method of assignment of subjects to treatments (e.g., randomization method, blinding or masking procedure, matching criteria); (h) planned sample size and power calculations; (i) rules for stopping the study; and (j) methods of statistical analysis in sufficient detail to permit replication. It is important to specify exactly how the patients were selected. The patients should be characterized in detail, so as to avoid confusion about uncontrolled variables. Give the reasons for a given patient's exclusion from the follow-up, and analyze whether or not he/she was a representative of the primary series. A follow-up close to 100 percent is required in most studies. Follow-up time should generally not be less than 2 years. Give the exact dates of the study.

Control group(s) should be described as precisely as experimental groups. In clinical trials, subjects should be randomly assigned to control and experimental groups. Except for the parameters studied, the experimental and control groups should not differ in any parameters that may influence the results. For animals, the species, sex, age, breed, and physiologic condition should be given.

Names of chemicals and devices used should be followed by the information on the manufacturer (name, city, and country) set in parentheses. Give generic names for the drugs and chemicals, followed by their commercial names in brackets.

Statistics

Instead of listing computer programs used for statistical analyses, list the tests used. Relate each test to a particular data analysis. This should be repeated in the Results section. Tables should not contain only statistical test results. Statistics is a tool, not the purpose of analysis; it serves to corroborate the specific data. Statistical significances should be shown along with the data in the text, as well as in tables and figures. Provide exact p-values, with three decimal places.

Results

A clinical study as conducted should include: (a) inclusive dates of accrual of study population; (b) sample size achieved; (c) how many subjects were excluded or withdrew, and the reasons; (d) demographic and clinical characteristics of the study population, including controls; and (e) how the study as conducted deviated from the study as planned, and the reasons (e.g., compliance).

Study findings should include: (a) estimates of treatment effects, stated as comparisons among treatment groups (e.g., differences in risks, rates or means of outcome measures, as well as exact p-values; (b) measures of precision for outcome measures and for estimates of treatment effects (confidence intervals, standard errors); (c) summary data and appropriate descriptive statistics; (d) complications of treatment; and (e) repository where original data can be obtained (e.g., principal investigator).

This section should not contain material that belongs to the Methods or Discussion sections. This type of mistake is the most common, and authors should pay special attention to dissociate the material for these three sections.

Key rules for writing the Results section are: (a) the text should be understandable without referring to the respective tables and figures, and *vice versa*; (b) however, the text should not simply repeat the data contained in the tables and figures; and (c) the text and data in tables and figures should be related to the statements in the text by means of reference marks.

Thus, it is recommendable to describe the main findings in the text, and refer the reader to the tables and figures, implying that details are shown there. Information on significance and other statistical data should preferably be given in the tables and figures. The formulations such as "It is shown in Table 1 that the outcome of Group A was better than that of Group B" should be replaced by "The outcome of Group A was better than that of Group B (Table 1)".

Call experimental groups by their real (albeit maybe more descriptive/longer) names, rather than assigning them numbers or letters. The need for brevity should not clash with the requirement that all results be presented.

Discussion

After summarizing the results, identify limitations and biases, compare and contrast them with previous findings and discuss theoretical and practical implications of your own; make cautious speculations and suggest future research; show what is new and how your results fit into the broad field described at the beginning of the introduction.

The discussion section should include interpretation of study findings, and results considered in the context of results in other trials reported in the literature. This section has three main functions: (a) assessment of the results for their validity with respect to the hypothesis, relevance of methods, and significance of differences observed; (b) discussion of relevant literature providing evidence or counterevidence for your findings; and (c) assessment of the significance of the conclusions for the application in further research.

Do not recapitulate your results, discuss them! Instead of re-stating the results, refer to the tables and figures.

Tables

Tables should bear Arabic numerals. Each table should be printed on a separate sheet of paper. Each table should be self-explanatory, with an adequate title (clearly suggesting the contents), and logical presentation of data. The title should not repeat the information given in the headings. Use tables in order to present the exact values of the data that cannot be summarized in a few sentences in the text. Use tables instead of case reports unless a very small number of cases are presented. Avoid repetitive words in the columns: these should be coded, and their explanations given in the footnotes. Never present the same data in more than one way: present them in a table OR a figure. Data should be organized so that related elements read downward, not across. The data arranged in columns should correspond to the time sequence of their collection when read from left to right:

Age Sex Symptoms Physical findings Radiographs Treatment Outcome.

Each column heading for numerical data should include the unit of measurement applied to all the data under the heading. Choose suitable SI units, so that the values given in the table should fall within the range 0-999. Large numbers can be expressed in smaller units with appropriate column headings (or footnotes).

Headings such as $x10^3$ for thousands should be avoided, as it is not clear whether the data given are to be or have already been multiplied by that factor. Consider carefully the number of digits (decimals) in your numerical findings. The precision of biological measurements seldom allows for more than 2 digits. Tabular footnotes should be indicated with superscript lower-case letters. Do not draw vertical lines in tables.

Figures

Diagrams, line drawings and photographs should be referred to as figures. They should be numbered in sequence with Arabic numerals. Legends to figures should be listed on a separate sheet, in the consecutive order. The legend of a figure should contain the following information: (a) the word "Figure", followed by its respective number; (b) figure title; (c) all the necessary explanations of symbols and findings, written continuously; (d) statistics. Do not put the title of the figure on the figure! To mark the figures, use a label pasted on its back, indicating the number of the figure, the title of the paper, the name of the first author, and the top of the figure. If a figure has several parts (e.g., A, B, C), this should be indicated in the figure rather than on the label. Several figures related to the same patient, e.g., radiographs taken at different times, should be labeled Figure 1 A, B, C, etc. rather than Figures 1, 2, 3. Symbols should be consistent throughout a series of figures. Use simple symbols, like closed and open circles, triangles and squares. Different types of connecting lines can be used. The meanings of symbols and lines should be defined in the legend. The axes should be equal in length so as to make the diagrams square. They should normally be thinner than curve

lines. Each axis should be labeled with a description of the variable it represents. Only the first letter of the first word should be capitalized. The labeling should be parallel with the respective axis. All units should be expressed in SI units and parenthesized. Make liberal use of scale markings, directed outwards. Axes should not extend beyond the last numeral, and should never be terminated by arrows. Choose units so that the values expressed may fall within the range between 0 and 999. All the values on a given axis should have the same number of decimals. If an axis is labeled in percentages, this should be indicated. Percentage figures are not allowed when the total number of the sample is fewer than 100. If an axis is not continuous, this must be indicated by a clearly marked interruption.

Figures should be drawn professionally, and submitted as sharp, glossy black-and-white photographs or high-quality laser prints in the exact format. Most figures are properly presentable in column width, ie, 7.9 cm. Suitable line thickness for this format is 0.17-0.35 mm, and suitable type size for capital letters is 1.5 mm. Do not draw three-dimensional graphs if not absolutely necessary. Do not shade the background.

Radiographs should be cropped so as to present only what is essential. It is rarely necessary to show normal radiographs, even for the purpose of comparison. Frontal and lateral projections should be of the same scale and density, and corresponding details (e.g., joint space) should be at the same level. The prints should be twice the format intended for publication. Publication of color illustrations is to be paid by the author (equivalent of DM 500 per page). Original transparencies should be submitted, as well as three sets of color prints in the suggested format for printing. Color illustrations cannot be printed black-and-white.

Common Mistakes in Presenting Data

Averages (means) should be followed by ±SD, and medians by ranges (in parentheses).

Percentages should not be given when the total sample number is less than 100. Otherwise, use absolute numbers, decimal fractions or "one third", "three quarters", etc. Percentages above 10 usually do not need decimals.

Details on the style of scientific writing can be found in several excellent books (5-8).

Acknowledgments

Technical help, critical reviews of the manuscript and financial or other sponsorship may be acknowledged. Do not acknowledge paid professional translations into English.

References

CMJ uses the Vancouver system (4) of reference formatting, with sequential numbering in the text, and respective ordering within the list. Excellent respective instructions in Croatian are regularly published in the first issue of each volume of *Liječnički vjesnik*. References cited in the manuscript are listed in a separate section immediately following the text. The authors should verify all references. Consult Index Medicus (9) or PubMed (*www.ncbi.nlm.nih.gov/PubMed/jbrowser.html)* for standard journal abbreviations.

A reference cited only in a table or figure is numbered in the sequence established by the first mention in the text of the table or figure containing the reference. References are double-spaced both within and between entries.

Do not put period after the reference number. Separate reference number and

Table 2. Checklist of items to include when reporting a randomized trial

	Item number	Descriptor	Reported on page No.
Title and abstract	1	How participants were allocated to interventions (e.g., "random allocation", "randomized", or "radomly assigned").	
Introduction			
Background	2	Scientified background and explanation of rationale.	
Methods			
Participants	3	Eligibillity criteria for participants and the settings and locations were the data were collected.	
Interventions	4	Precise details of the interventions intented for each group and how and when they were actually administered.	
Objectives	5	Specific objectives and hypotheses.	
Outcomes	6	Clearly defined primary and secondary outcome measures and, when applicable, any methods used to enhance the quality of mesaurements (e.g., multiple observations, training of assessors, etc).	
Sample size	7	How sample size was determined and, when applicable, explanation of any interim analyses and stopping rules.	
Randomization sequence generation	8	Method used to generate the random allocation sequence, including details of any restriction (e.g., blocking, stratification).	
Allocation concealment	9	Method ued to implement the random allocation sequence (e.g., numbered containers or central telephone), clarifying whether the sequence was concealed until interventions were assigned.	
Implementation	10	Who generated the allocation sequence, who enrolled participants, and who assigned participants to their groups.	
Blinding (masking)	11	Whether or not participants, those administering the interventions, and those assessing the outcomes were aware of group assigment. If not, how succes of masking was assessed.	
Statistical methods	12	Statistical methods used to compare groups for primary outcome(s); methods for additional analyses, such as subgroup analyses and adjusted analyses.	
Results			
Participant flow	13	Flow of participants through each stage (a diagram is strongly recomended). Specifically, for each group, report the numbers of participants randomly assigned, receiving intended treatment, completing the study protocol, and analysed for the primary outcome. Describe protocol deviations from study as planned, together with reasons.	
Recruitment	14	Dates defininig the periods of recruitment and follow-up.	
Baseline data	15	Baseline demographic and clinical characteristic of each group.	
Numbers analyzed	16	Nimber of participants (denominator) in each group included in each analysis and whether the analysis was by "intention to treat". State the results in absolute numbers when feasible (e.g., 10/20, not 50%).	
Outcomes and estimations	17	For each primary and secondary outcome, a summary of results for each group, and the estimated effect size and its pecision (e.g., 95% CI).	
Ancillary analyses	18	Adress multiplicity by reporting any other analyses performed, including subgroup analyses and adjusted analyses, indicating those prespecified and those exploratory.	
Adverse events	19	All important adverse events of side-effects in each intervention group.	
Discussion			
Interpretation	20	Interpretation of the results, taking into account study hypotheses, source od potential bias or imprecision and the dangers associated with multiplicity of analyses and outcomes.	
Generalizability	21	Generalizability (external validity) of the trial findings.	
Overall evidence	22	General interpretation of the results in the cotext of current ecidence.	

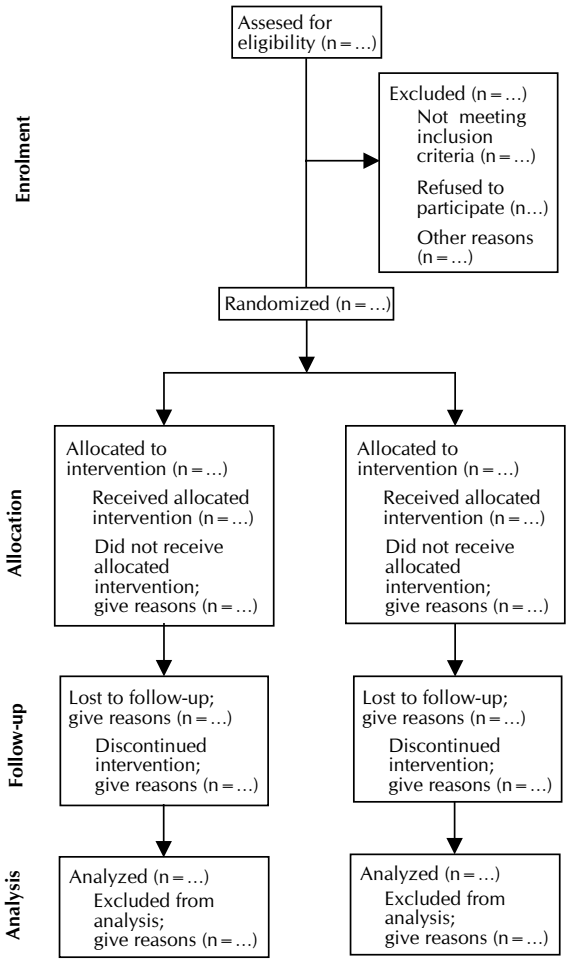

Figure 1. Flow diagram of the progress through the phases of a randomized trial.

(last) name of first author by one space only.

Provide names of all authors when there are six or fewer; if there are seven authors or more, list only the first six, followed by "et al". Journal references should include the following information, listed in the order indicated: authors, article title and subtitle, journal abbreviation, year, volume number in Arabic numerals, and inclusive pages.

Book references are listed as follows: authors, title, edition (if other than first), volume (if more than one), city, publisher, year. When referring to a book chapter, the order changes as follows: authors of the chapter, title of the chapter, "In:", editors/authors of the book (for editors, the names should be followed by "editor(s)"), edition (if other than first), volume (if more than one), city, publisher, year, and inclusive pages of the chapter. Please note the following examples for format and punctuation:

Article: Vrdoljak E, Milas L. Apoptosis: basic biology and relationship to cancer. Croat Med J 1996;37:141-51.

Book (personal authors): Colson JH, Armour WJ. Sports injuries and their treatment. 2nd rev. ed. London: S. Paul; 1986.

Book (editors): Faist E, Baue AE, Schildberg FW, editors. The immune consequences of trauma, shock and sepsis. Mechanisms and therapeutic approaches. 1st vol. Lengerich (Germany): Pabst Science Publishers; 1996.

Organization as author and publisher: Virginia Law Foundation. The medical and legal implications of AIDS. Charlottesville (VI): The Foundation; 1987.

Chapter in a book: Weinstein L, Swartz MN. Pathologic properties of invading microorganisms. In: Sodeman WA Jr, Sodeman WA, editors. Pathologic physiology: mechanisms of disease. Philadelphia (PA): Saunders; 1974. p. 457-72.

Supplement (to the volume): Gale RP. Nuclear terrorism. Croat Med J 1992;33 War suppl 2:3-5.

Report in the proceedings (conference paper): Harley NH. Comparing random daughter dosimetric and risk models. In: Gammage RB, Kaye SV, editors. Indoor air and human health. Proceedings of the Seventh Life Sciences Symposium; 1984 Oct 29-31; Knoxville (TN). Chelsea (MI): Lewis; 1985. p. 69-78.

Reference language other than English: Original language of the work referred to (e.g., Croatian) should be retained rather than translated into English. However, the words describing something in the reference should be in English (eg, "in", "editor", "2nd ed.", "translated from German by", etc.). An example *(chapter in a book written in Croatian):* Krizmanić M. Preparing for the return of the disabled [in Croatian]. In: Krizmanić M, editor. Povratak prognanika. Psihološka, socijalna, zdravstvena i duhovna priprema. Zagreb: Dobrobit; 1995. p. 99-101.

Unpublished information: Reference to a personal communication or manuscript categorized as "in preparation" or "submitted for publication" is discouraged. However, if such a reference is essential and refers to a written communication, the source should be cited parenthetically in the text, with the comment "unpublished data", but not listed with the references. A paper accepted but not yet published is listed with the references, with the indication "in press".

Data deposited in structured database:

Journal article in electronic format: Morse SS. Factors in the emergence of infectious diseases. Emerg Infect Dis [serial online] 1995 Jan-Mar [cited 1996 Jun 5];1(1):[24 screens]. Available from URL: http://www.cdc.gov/ncidod/EID/eid.htm.

Monograph in electronic format: CDI, clinical dermatology illustrated [monograph on CD-ROM]. Reeves JRT, Maibach H. CMEA Multimedia Group, producers. 2nd ed. Version 2.0. San Diego (CA): CMEA; 1995.

Computer file: Hemodynamics III: the ups and downs of hemodynamics [computer program]. Version 2.2. Orlando (FL, USA): Computerized Educational Systems; 1993.

Reporting Randomized Controlled Trials

When you submit a report on a randomized controlled study, you should complete the checklist (Table 2) and flow diagram (Fig. 1) and submit both with your manuscript, as these are essential for the review process. These CONSORT guidelines (10) should assist you and your reviewers in assessing the manuscript. Please note the additional subheadings that should appear in the manuscript and the flow diagram which should appear as a figure within the manuscript. For more information, please consult the CONSORT website (*www.consort-statement.org*). The checklist and flow diagram will be reviewed along with the manuscript.

Abbreviations

Only *standard abbreviations and symbols* may be used without definition and may be used in the title of the page-heading title. Table 3 lists some frequently used standard abbreviations and symbols. Non-standard abbreviations, the use of which should be kept to a minimum compatible with clarity and conciseness, should not be used in the title or page-heading title. They must be explained in the text in the following way: the term should be written in full when it appears in the text for the first time, followed by the abbreviation in parentheses; from then on, only abbreviation is used in the

Table 3. Common medical and tehnical abbreviations and symbols

Standard abbreviations and symbols which do not need explanation:

Abbreviation	Explanation
AC	alternating current
DC	direct current
DNA	deoxyribonucleic acid
HLA	human leukocyte antigen
IQ	intelligence quotient
m-	meta- (only in chemical formulas or names)
o-	ortho- (only in chemical formulas or names)
OD	oculus dexter (always with a number)
OS	oculus sinister (always with a number)
OU	oculus unitas or oculus uterque (only with a number)
p-	para- (only in chemical formulas or names)
$PaCO_2$	carbon dioxide arterial blood pressure
PaO_2	oxygen arterial blood pressure
PCO_2	carbon dioxide pressure
pH	concentration of hydrogen ions; negative logarithm of the hydrogen ion concentration
PO_2	oxygen pressure
RNA	ribonucleic acid
UHF	ultrahigh frequency
UV	ultraviolet
VDRL	Venereal Disease Research Laboratory

Non-standard abbreviations that have to be explained in the text:

ACTH	corticotropin (previously adrenocorticotropic hormone)
ADH	antidiuretic hormone
ADP	adenosine diphosphate
ADPase	adenosine diphosphatase
AFP	-fetoprotein
AIDS	acquired immunodeficiency syndrome
ALT	alanine aminotransferase (earlier SGOT)
AMP	adenosine monophosphate
ANA	antinuclear antibody
APB	atrial premature beat
ARDS	adult respiratory distress syndrome
AST	aspartate aminotransferase (previously SGPT)
ATP	adenosine triphosphate
ATPase	adenosine triphosphatase
BCG	Bacille Calmette-Guérin (but: BCG vaccine)
BP	blood pressure
BSA	body surface area
BTPS	body temperature, pressure, saturated
C	complement (e.g., C_1, C_2, ... C_9)
cAMP	cylic adenosine monophosphate
CBC	complete blood cell (ADD count)
CEA	carcinoembryonic antigen
CFT	complement fixation test
cGMP	cylic guanosine monophosphate
CI	confidence interval
CK	creatine kinase
CK-BB	creatine kinase-BB
CK-MB	creatine kinase-MB
CK-MM	creatine kinase-MM
CMV	cytomegalovirus
CNS	central nervous system
COPD	chronic obstructive pulmonary disease
CPR	cardiopulmonary resuscitation
CRF	corticotropin-releasing factor
CSF	cerebrospinal fluid
CT	computed tomography, computed tomographic
dAMP	deoxyadenosine monophosphate
D&C	dilatation and curettage
DDT	dichlorodiphenyltrichloroethane
DE	dose equivalent
DEV	duck embryo vaccine
dGMP	deoxyguanosine monophosphate
DIC	disseminated intravascular coagulation
DIF	direct immunofluorescence
DNR	do not resuscitate
DRG	diagnosis related group
EBV	Epstein-Barr virus
ECG	electrocardiogram, electrocardiographic
ECT	electroconvulsive therapy
ED	effective dose
ED_{50}	median effective dose
EEE	eastern equine encephalomyelitis
EEG	electroencephalogram, electroencephalographic
EIA	enzyme immunoassay
EIS	Epidemic Intelligence Service (Centers for Disease Control)
ELISA	enzyme-linked immunosorbent assay
EMG	electromyogram, electromyographic
EMIT	enzyme-multiplied immunoassay technique
ENG	electronystagmogram, electronystagmographic
EOG	electro-oculogram, electro-oculographic
ESP	extrasensory perception
ESR	erythrocyte sedimentation rate
ESRD	end-stage renal disease
EST	electroshock therapy
EVR	evoked visual response
FEV	forced expiratory volume
FEV_1	forced expiratory volume in 1 second
FSH	follicle-stimulating hormone
FTA	fluorescent treponemal antibody
FTA-ABS	fluorescent treponema antibody absorption
FVC	forced viral capacity
GDP	guanosine diphosphate
GFR	glomerular filtration rate
GI	gastrointestinal
GLC	gas-liquid chromatography
GMP	guanosine monophosphate
GMT	geometric mean titer
GnRH	gonadotropin-releasing hormone
HbCO	carboxyhemoglobin
HBO	hyperbaric oxygen
HbO_2	oxyhemoglobin, oxygenated hemoglobin
HbS	sickle cell hemoglobin
HBV	hepatitis B virus
hCG	human chorionic gonadotropin
HDL	high-density lipoprotein
HDL-C	high-denstiy lipoprotein cholesterol
HIV	human immunodeficiency virus
HMO	Health Maintenance Organization
HPF	high power field
HPLC	high performance liquid chromatography
HSV	herpes simplex virus
HTLV	human T-cell lymphotropic virus, human T-cell leukemia virus
ID	infective dose
Ig	immunoglobulin
IM	intramuscular
IND	Investigational New Drug
IOP	intraocular pressure
ISG	immune serum globulin
ITP	idiopathic thrombocytopenic purpura
IUD	intrauterine device
IV	intravenous, intravenously
IVP	intravenous pyelogram
LAV	lymphadenopathy-associated virus
LD	lethal dose
LD_{50}	median lethal dose
LDH	lactate dehydrogenase
LDL	low-density lipoprotein
LDL-C	low-density lipoprotein cholesterol
LH	luteinizing hormone
LHRH	luteinizing hormone-releasing hormone
LSD	lysergic acid diethylamine
MCH	mean corpuscular hemoglobin
MCHC	mean corpuscular hemoglobin concentration
MCV	mean corpuscular volume
MD	muscular dystrophy
MEC	mean effective concentration
MMPI	Minnesota Multiphasic Personality Inventory
MRI	magnetic resonance imaging
mRNA	messenger RNA
MS	multiple sclerosis
NDA	New Drug Application
NF	National Formulary
NK	natural killer
NSAID	nonsteroidal anti-inflammatory drug
NS	not significant
NTP	normal temperature and pressure
OR	odds ratio

Table 3. Common medical and tehnical abbreviations and symbols in medicine (continued)

Abbreviation	Explanation	Abbreviation	Explanation
PAS	periodic acid-Schiff	sp g	specific gravity
PEEP	positive end-expiratory pressure	STD	sexually transmitted disease
PET	positron emission tomography	T_3	triiodothyronine
PID	pelvic inflammatory disease	T_4	thyroxine
PKU	phenylketonuria	TCD_{00}	tissue culture dose
PPD	purified protein derivative (tuberculin)	TIBC	total iron-binding capacity
PSRO	Professional Standard Review Organization	TPA	tissue plasminogen activator
PT	prothrombin time	TPN	total parenteral nutrition
PTA	percutaneous transluminal angioplasty	TRH	thyrotropin-releasing hormone
PTSD	posttraumatic stress disorder	tRNA	transfer ribonucleic acid
PTT	partial thromboplastin time	TSH	thyrotropin
PUVA	oral psoralen with long-wave UV radiation in the A range	TSH-RF	thyroid-stimulating hormone-releasing factor
RAM	random access memory	TSS	toxic shock syndrome
RAST	radioallergosorbent test	TTP	thrombotic thrombocytopenic purpura
RBC	red blood cell	*USAN*	*United States Adopted Names*
REM	rapid eye movement	*USP*	*United States Pharmacopeia*
ROM	read-only memory	VEP	visual evoked potential
RR	relative risk	VER	visual evoked response
RSV	respiratory syncytial virus	VHDL	very-high-density lipoprotein
SCID	severe combined immunodeficiency disease	VLDL	very-low-density lipoprotein
SEM	scanning electron microscope	VPB	ventricular premature beat
SIADH	syndrome of inappropriate secretion of antidiuretic hormone	WAIS	Wechsler Adult Intelligence Scale
SIDS	sudden infant death syndrome	WBC	white blood cell
SLE	systemic lupus erythematosus; St Louis encephalitis	WEE	western equine encephalomyelitis

text. This applies separately to the Abstract and the rest of the text.

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